OAQ Process Information Application
PI-15: PORTLAND CEMENT MANUFACTURING
State Form 52556 (2-06)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, Indianapolis, IN 46204

Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem/air/permits/index.html

NOTES:

- The purpose of this form is to obtain detailed information about the Portland Cement Manufacturing Processes. Complete one form for each process unit (or group of identical process units).
- Detailed **instructions** for this form are available online at www.IN.gov/idem/air/permits/apps/instructions/pi15instructions.html.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Portland Cement Manufacturing Processes

Part A identifies the processes related to Portland Cement manufacturing and additional forms that may be needed.

1. Process	2. Use the form listed for the specified processes. Check all that apply.
a. Quarry and/or Mine Activities	This form is included for quarrying and mine processes: ☐ **PI-03** ☐ **N/A**
b. Raw Material Storage and Handling	This form is included for raw materials unloading / storage: ☐ **PI-03** ☐ **N/A**
c. Non-Metallic Mineral Processing (crushing and sizing of raw materials)	This form is included for the raw materials processing: ☐ **PI-18** ☐ **N/A**
d. Ground Material Storage and Handling	This form is included for the raw mills storage / handling: ☐ **PI-03** ☐ **N/A**
e. Pre-heater / Pre-calciner	This form is included for the pre-heater: ☐ **PI-02** ☐ **N/A**
f. Fuel used for pre-heater / pre-calciner (if other than natural gas)	Submit form if fuel other than Natural Gas used: ☐ **PI-02F** ☐ **N/A**
g. Kiln	These forms are included for the kiln: ☐ **PI-02A** ☐ **N/A**; ☐ **PI-02E** ☐ **N/A**; ☐ **PI-02G** ☐ **N/A**; ☐ **PI-02H** ☐ **N/A**
h. Fuel Type for Kiln (if other than Natural Gas)	Submit form if fuel other than Natural Gas used in the kiln: ☐ **PI-02F** ☐ **N/A**
i. Clinker Material Storage and Handling	This form is included for the clinker storage / handling: ☐ **PI-03** ☐ **N/A**
j. Non-Metallic Mineral Processing (crushing and sizing of clinker)	This form is included for clinker processing: ☐ **PI-18** ☐ **N/A**
k. Other process(es)	This form is included for *(specify process)*: ☐ ☐ **N/A**

Continued on Next Page

PART B: Portland Cement Manufacturing Summary	
Part B identifies the Portland Cement Manufacturing details.	
3. Maximum Amount of Raw Materials Processed:	tons per hour *(tons/hr)*
	tons per year *(tpy)*
4. Raw Material *(as a percentage of total)*:	☐ Calcium Carbonate
	☐ Aragonite
	☐ Chalk
	☐ Chalk
	☐ Other (*specify*):
5. Maximum Amount of Portland Cement Produced:	tons per year *(tpy)*

Part C – Federal Rule Applicability			
Part C identifies any federal rules that apply to the process.			
6. Is a **New Source Performance Standard (NSPS)** applicable to this source? *If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.*		☐ Yes ☐ No	**7. Unit ID(s)**
☐ 40 CFR Part 60, Subpart F	Portland Cement Plants		
☐ 40 CFR Part 60, Subpart OOO	Non-Metallic Mineral Processing Plants		
☐ 40 CFR Part 60, Subpart UUU	Calciners and Dryers in Mineral Industries		
8. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.*		☐ Yes ☐ No	**9. Unit ID(s)**
☐ 40 CFR Part 63, Subpart LLL	Portland Cement		
10. Non-Applicability Determination: *Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.*			

This space is intentionally left blank.

Continued on Next Page

PART D: Kiln Dust Operations

Part D provides information about the Cement Kiln Dust (CKD) Operations.

11. Type of Equipment	12. Unit ID	13. Installation Date	14. Maximum Throughput *(tons/hr)*

The following section identifies all emission factors used to calculate air emissions from the cement kiln dust operations.

15. Air Pollutant:	16. Emission Factor		17. Source of Emission Factor *(if not using AP-42, include calculations)*
	value	*units*	
Carbon Monoxide (CO)			☐ AP-42 ☐ Other ☐ N/A
Lead (Pb)			☐ AP-42 ☐ Other ☐ N/A
Nitrogen Oxides (NO_X)			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter (PM)			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter less than 10μm (PM_{10})			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter less than 2.5μm ($PM_{2.5}$)			☐ AP-42 ☐ Other ☐ N/A
Sulfur Dioxide (SO_2)			☐ AP-42 ☐ Other ☐ N/A
Volatile Organic Compounds (VOC)			☐ AP-42 ☐ Other ☐ N/A
Worst Case HAP *(specify)*:			☐ AP-42 ☐ Other ☐ N/A
Other *(specify)*:			☐ AP-42 ☐ Other ☐ N/A

18. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

☐ None

☐ Baghouse / Fabric Filter – *Attach CE-02.*

☐ Cyclone – *Attach CE-03.*

☐ Electrostatic Precipitator – *Attach CE-04.*

☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*

☐ NO_X Reduction – *Attach CE-09.*

☐ Other *(specify)*: – *Attach CE-10.*

19. Control Techniques: *Identify all control techniques used for this process.*

20. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on Next Page

PART E: Clinker Cooler Operations

Part E provides information about the clinker cooler.

21. Type of Clinker Cooler	22. Unit ID	23. Installation Date	24. Maximum Throughput *(tons/hr)*

The following section identifies all emission factors used to calculate air emissions from the clinker cooler.

25. Air Pollutant:	26. Emission Factor		27. Source of Emission Factor *(if not using AP-42, include calculations)*
	value	*units*	
Carbon Monoxide (CO)			☐ AP-42 ☐ Other ☐ N/A
Lead (Pb)			☐ AP-42 ☐ Other ☐ N/A
Nitrogen Oxides (NO_X)			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter (PM)			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter less than 10μm (PM_{10})			☐ AP-42 ☐ Other ☐ N/A
Particulate Matter less than 2.5μm ($PM_{2.5}$)			☐ AP-42 ☐ Other ☐ N/A
Sulfur Dioxide (SO_2)			☐ AP-42 ☐ Other ☐ N/A
Volatile Organic Compounds (VOC)			☐ AP-42 ☐ Other ☐ N/A
Worst Case HAP *(specify)*:			☐ AP-42 ☐ Other ☐ N/A
Other *(specify)*:			☐ AP-42 ☐ Other ☐ N/A

28. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

☐ None

☐ Baghouse / Fabric Filter – *Attach CE-02.*

☐ Cyclone – *Attach CE-03.*

☐ Electrostatic Precipitator – *Attach CE-04.*

☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*

☐ NO_X Reduction – *Attach CE-09.*

☐ Other *(specify)*: – *Attach CE-10.*

29. Control Techniques: *Identify all control techniques used for this process.*

30. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*